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REMARKS

Applicant respectfully requests reconsideration of the application in view of the following remarks. The pending claims have not been amended, and thus claims 13-22 remain pending.

Applicant has made a diligent effort to demonstrate and place the claims in condition for allowance. However, should there remain any outstanding issues that require adverse action, it is respectfully requested that the Examiner telephone the undersigned at (805) 781-2865 so that such issues may be resolved as expeditiously as possible.

Turning to the specific objections and rejections:

1. Claims 13-22 stand rejected under 35 U.S.C. § 102(b), as being anticipated by Kastan et al., U.S. Patent No. 4,545,691. However, Kastan fails to teach or suggest each element of the invention as claimed, and further teaches away from the invention as claimed. More specifically, claim 13, for example, recites in part:

at least one of said outer races is mounted in said outer bracket portion such that it is free to move in both axial directions.

As such, the claimed invention provides an outer bearing being free in both directions. Kastan fails to teach at least a bearing assembly having an outer race that is free to move in both axial directions, and alternatively teaches away the outer race being free to move in both axial directions.

The Kastan patent fails to suggest at least the movement of at least one outer race in both axial directions, and further teaches away from the outer bearing being movable in

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both axial directions. The Kastan patent clearly describes at column 7, lines 17-21, that even minute "[l]ongitudinal movement of the lock rings 50 and 76 is not desired since such movement . . . will tend to 'bind up' the balls 42 and 68." The lock rings are specifically positioned by the bearing housing. Therefore, it is clear that the outer race is in contact with the bearing housing because lateral movement of the lock rings will cause lateral movement of the bearing housing, and bearing housing will cause movement of the outer race binding up the balls. Further, the Kastan patent teaches away from the free movement of the outer race because such movement "will tend to 'bind up' the balls 42 and 68." (Kastan, col. 7, lines 17-21). Therefore, the Kastan patent teaches away from the free movement of the outer race in both axial directions.

Further, Kastan continues to describe that normal "slight longitudinal movement [of the lock rings] ... will be transmitted to the ball bearings 42 and 68." (Kastan, col. 7, lines 27-29). It is clear that the bearing housings, which support the lock rings, are in contact with the outer race of the bearings because slight movements are transferred to the ball bearings. Therefore, it is also clear that the outer race described in Kastan is not free to move in both axial directions.

Still further, the Kastan patent states at column 5, lines 10-11, that "[t]he outer race 44 is pressed into the interior of the bearing housing 46." Kastan clearly teaches that the outer race is pressed into and in contact with the bearing housing, preventing movement in at least one direction. Further, Figures 3-8 of the Kastan patent clearly show the outer race 44 in direct contact with the bearing housing 46. Therefore, the Kastan patent does not teach the outer race

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having free movement in both axial directions, and further teaches away from the free movement.

The Kastan patent was addressed in the Background section of the subject, pending application. More specifically, the Background recites in part at page 3, lines 17-22:

Kastan shows a bottom bracket assembly for a bicycle where the inner races of the cartridge bearings are fit on the axle and are clamped between a shell and an adapter to fix their axial position. The outer races are butted against shoulders located in the bearing adapters. During initial assembly, the bearing adapters are allowed to float. The adapters are then tightened into axial alignment with the inner bearing races by a tapered split ring.

Thus, the Applicant points out that the Kastan patent does not teach or suggest an outer race that is free to move in both axial directions.

Applicant respectfully submits that the Kastan patent makes it clear throughout the description that the bearing is pressed snug against the bearing housing so that a tight fit is achieved when an expanding ring, positioned around the outer bearing is pressed against the wall of the hub. As the bearing housing is pressed snug, the bearing housing further presses snug against the outer race to stabilize the race. Therefore, the Kastan patent teaches away from providing movement of the outer race in both axial directions, and thus claim 13 and the claims that depend from claim 13 are not taught by the Kastan patent.

Independent claims 17 and 21 include similar claim language as discussed above in reference to claim 13.

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Therefore, claims 17 and 21, and the claims that depend from claims 17 and 21, are not anticipated by the Kastan patent for at least the reasons provided above.

Independent claim 22 recites in part, "a bicycle with two crank arms [where] said crank arms abut against the outer stop elements in an axial direction." The Kastan patent does not teach or describe the crank arm abutting against the outer stop. Alternatively, Kastan describes a single, continuous crank and as such, the crank arms cannot abut against the outer stop.

Claim 22 further recites in part, "spindle [can] comprise adapting portions to receive said crank arms." The Kastan patent additionally fails to suggest that the spindle can comprise adapting portions to receive the crank arms. Further, Kastan et al. also clearly shows that "bearing adapters" (reference number 34 and 94) provide the outer stop for the inner bearing races, and the bearing adapters 34 and 94 abut against the sprocket 22 and a lock nut 96, respectively. These bearing adapters do not abut against the stop elements as is claimed. The Kastan patent fails to teach each element of claim 22. Thus, claim 22 is not anticipated by the Kastan patent, and therefore, applicant respectfully submits that claim 22 is in a condition for allowance.

Regarding claims 14 and 18, claim 14 recite in part that the spindle includes a step that is "an inner stop element." The Kastan patent fails to suggest that the spindle can include a step that is a stop element. Kastan instead incorporates separate components to provide any stops. Claim 18 recites similar language as recited in claim 14. Therefore, the Kastan patent fails to teach each element as recited in claims 14 and 18, and thus claims 14 and 18 are not anticipated by the

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Kastan patent.

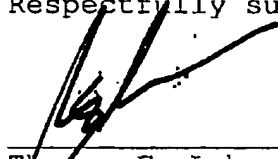
CONCLUSION

Applicant respectfully submits that the above remarks clearly distinguish the pending claims over the cited reference, and as such, claims 13-22 are in a condition for allowance. Therefore, a Notice of Allowance is respectfully requested.

Respectfully submitted,

11/14/03

Date



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